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THE PREPARATION AND THERAPEUTIC APPLICATION OF PROT- IODIDE OF IRON

BY A. S. HUDSON, M.D., PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS IN
THE MEDICAL DEPARTMENT OF THE IOWA UNIVERSITY.

THE importance of the chalybeate tonics, as general therapeutic agents, has long been acknowledged by the profession; and in proportion to the importance of iron as a remedy, we are interested in obtaining its genuine preparations.

In the arts, there is no metal so valuable as iron; in medicine, there are few drugs more useful. Amid all the changes of fashion in medicine, this may be ranked as one of the time-honored articles of the materia medica. It constitutes, indeed, an integral part of our own organism.

To the physiologist, the study of its relations, as the great oxidizing agent of the blood, is full of interest. He looks upon the red disks of the blood as maintaining a kind of commerce, as it were, between the solid and deep-seated structures of the body and the atmospheric air, conveying from without to the interior, atoms of oxygen, and from the systemic capillaries to the lungs, effete matter necessary to be depurated from the circulation. Abstract, by any means, from the blood a large portion of its red disks, and thereby destroy its capacity to carry on this important and life-depending trade, and a diseased condition of the system is the immediate result. The languid countenance, the blanched cheek, the low vitality of solid structures, and the derangement of general and special functions, all point to the therapeutical indication for the iron tonics, and the range of indication is only bounded by the limits of the consequent disturbances.

Iodine, like mercury and antimony, is a liquefacient, resolvent and alterative, without being followed by the evil consequences sometimes resulting from the use of these remedies. It promotes interstitial absorption, reduces solid structures to fluids, spurs into action the absorbent system, lessens morbid glandular indurations, and thereby, in a great degree, corrects perverted nutrition.

In view, then, of the physiological relation of iron, and the pathological bearing of iodine, we do not wonder that respectable and distinguished members of our profession should claim for these agents, when combined, the rare assemblage of the virtues of both, with the unpleasant

and troublesome attributes of neither. When thus combined, we have the iodide, or rather the *proto-iodide of iron*.

This, when pure, is one of the most important articles within the whole range of our opulent materia medica; and for the purpose of presenting the *tests* of its purity, I extract from an article in the Dublin Medical Press. Of this compound, Dr. Dupasquier, the author of the article to which I refer, remarks:—

“The proto-iodide of iron generally used, is a medicine totally different, both in its chemical nature and its therapeutic action, from the proto-iodide which I use; the former is not a proto-iodide, although so named in all the formulæ, but a mixture: the composition varies according to the greater or less precautions employed in its preparation and conservation. When dissolved in water, the liquid, instead of being colorless, or scarcely colored green, is brown, more or less deep, according as the iodide has been more or less exposed to the air. The smell and taste indicate the presence of a notable quantity of free iodine. A properly-prepared solution should have no smell, nor more taste than the other salts of iron. It should have no apparent action on amidine, and with yellow cyanide of potassium it should afford a white precipitate; but with both these re-agents the solution of common proto-iodide of iron affords a blue powder; in the latter, a very deep blue.

“In fine, the common iodide of iron of apothecaries’ shops, named in the pharmacopœias and formularies proto-iodide, is a mixture, in very variable proportions, of free iodine, periodide of iron, mixed with some proto-iodide not yet entirely decomposed, and sesquioxide of iron.”

I am assured by those who have made extensive and careful trial of the article, that Dr. Dupasquier, by suspending the salt in gummy mucilage, has hit upon an admirable plan for preparing the medicine, which remedies all the defects ascribed to the commercial article. The *appearance* of his preparation is an invariable test of its purity. The prescribing physician needs only to look upon it to pronounce upon its genuineness.

Two, from among the several preparations given by Dr. Dupasquier, will answer most practical purposes—the *syrup* and the *pills*.

“The following is the solution:—Take of iodine, 15.12 grains; iron filings, 30.23 do.; distilled water, 120.89 do. Introduce the whole into a small matrass, which hold plunged, during eight or ten minutes, in water heated to about 167° F., so that no portion of the iodine shall be volatilized. Agitate the mixture frequently. At first the liquid becomes brown, but soon becomes perfectly colorless, or at most retains a nearly imperceptible green hue. This preparation ought to be extemporaneous, for it would be a vain attempt to preserve it unaltered one hour, even in ground-stopper bottles, and although metallic iron were present, owing to the decomposition of the water. From this Dr. Dupasquier prepares the *syrupus proto-iodidi ferri*.

“Take of the foregoing solution 60½ Troy grains; syrup of gum Arabic, colorless and thick, 6.3 Troy ounces weight; syrup of orange flowers, 1.575 Troy ounce weight. Mix perfectly by agitation during a few moments. It is indispensable that the syrups be colorless, so that the

physician may have ocular proof that the medicine is not altered or injured. This should have more than usual consistence, in order that the addition to the normal solution shall not impart such fluidity as would facilitate the alteration of the ferruginous salt by contact of air.

"The following is the formula for the *pilulæ proto-iodidi ferri*:—Take of iodine, 121 grains; iron, 242 do.; distilled water, 378 do. Proceed with these to form a normal solution as before; filter, and pour the solution into an untinned iron vessel; add honey, 302 grains; evaporate rapidly, until a great part of the original water be dissipated, and a syrupy consistence shall be attained; then add at intervals, continually agitating with an iron spatula, powder of gum tragacanth 184 grains. Form a mass and divide into 150 pills."

Each of the above pills contains just one grain of proto-iodide of iron. These may be kept ready made several weeks, and, with extra care, perhaps several months. The action of air and light may deepen the shade of color on the surface. If, by breaking them open, the mass of the pill presents the clear transparent character, its composition remains unchanged. Should they present, however, a dark or brown appearance, the salt is decomposed, and the commodity is worthless. Would they not keep indefinitely if coated with sugar or gelatine?

In this country, where scrofulous temperaments are common—where pulmonic diseases prevail, and where numerous cases of chlorotic complications deceive and perplex the physician, the virtues of the iodide of iron cannot be too minutely studied, nor too faithfully tested.

In *anæmia*, or in the strumous diathesis, perverted nutrition is always present. The plasticity of the blood is broken down, and the arrest of secondary assimilation, with all its pathological results, must inevitably follow. Chyle may be liberally furnished, and wrought into albumen; lymph globules may not be deficient; but, instead of the secondary assimilation finishing their conversion into fibrin, or blood plasma, and the fibrin into flesh, or living tissue, lymph is irregularly deposited in unnatural localities; sometimes in the liver, on the intestines, the mesentery, and in the lungs. When deposited in the lungs, tubercle is developed, and a state of *anæmia* exists.

Three objects, then, are sought in the treatment of this general pathological condition; first, to restore the hematosine to the blood, and thereby, by increasing its vitality, prevent the further irregular deposition of lymph, by converting it into fibrin; second, to promote, at the same time, the various secretions; and, third, to stimulate the absorbents, and take up and remove the unnatural deposits.

How shall we effect these? This is an important inquiry. Iron will correct the former, but too often arrests the latter. While it enriches the blood, it is apt to lock up the secretions, and produce fever, thirst, headache, &c. By itself it can lay no claim to a direct secernment action. Not so, however, with its binary compound—iodide of iron. It combines, with a tonic action, that of a liquefacient, alterative and diuretic, and thus obviates the objection to the iron by itself under peculiar circumstances.

It is important that a remedy, so valuable in its therapeutic applica-

tion in all forms of cachexia, should be obtained *pure*; and from the tests given in the extracts already quoted, it will be seen that the common commercial article of the shops, which has been, possibly, exposed for months or years to the decomposing action of light and oxygen, possesses none of the characteristics of the genuine prot-iodide of iron.

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DEFECT AND IMPOTENCE OF MEMORY AFTER PARALYSIS.

BY ROBERT J. GRAVES, M.D., F.R.S.

A FARMER in the county of Wicklow, in comfortable circumstances, when 50 years of age, had a paralytic fit, in the year 1839; since that time, he never recovered the use of the affected side, and still labors under a painful degree of hesitation of speech. He is, however, able to walk about, take a great deal of active exercise, and superintend the business of his farm. His memory seems to be tolerably good for all parts of speech except noun-substantives and proper names; the latter he cannot at all retain; and this defect is accompanied by the following singular peculiarity:—that he perfectly recollects the initial letter of every substantive or proper name for which he has occasion in conversation, though he cannot recall to his memory the word itself. Experience, therefore, has taught him the utility of having written in manuscript a list of the things he is in the habit of calling for or speaking about, including the proper names of his children, servants and acquaintances. All these he has arranged alphabetically in a little pocket dictionary which he uses as follows: if he wishes to ask anything about a cow, before he commences the sentence he turns to the letter C, and looks out for the word “cow,” and keeps his finger and eye fixed on the word until he has finished the sentence. He can pronounce the word “cow” in its proper place, so long as he has his eye fixed upon the written letters; but the moment he shuts the book it passes out of his memory, and cannot be recalled, although he recollects its initial, and can refer to it again when necessary. In the same way when he comes to Dublin, and wishes to consult me (for my name is among the indispensable proper names in his dictionary), he comes with his dictionary open to the hall-door, and asks to see Dr. Graves; but, if by accident he has forgotten his dictionary, as happened on one occasion, he is totally unable to tell the servant what or whom he wants. He cannot recollect his own name unless he looks out for it, nor the name of any person of his acquaintance; but he is never for a moment at a loss for the initial which is to guide him in his search for the word he seeks.

His is a remarkably exaggerated degree of the common defect of memory, observed in the diseases of old age, and in which the names of persons and things are frequently forgotten, although their initials are recollected. It is strange that substantives and proper names, words which are first acquired by the memory in childhood, are sooner forgotten than verbs, adjectives, and other parts of speech, which are a much later acquisition.

A lady about 50 years of age, who was laboring under what is popularly termed a breaking up of the system—that is, a simultaneous decrease in the energy of all the vital functions—showed among the first symptoms a defect of memory similar to that which I have related above. The first name which she was perceived frequently to forget was that of a family with whom she was very intimate, and whom she saw almost every day, and she was much tormented by this defect, whenever she had occasion to refer to any of its members in conversation. After a time this defect extended to the names of other persons and things; in the course of a few months she lapsed into a general want of memory, and weakness of intellect.

It is interesting to compare such cases with the temporary loss of memory which is produced by inebriety, and the permanent loss of the same faculty that shows itself in old age. Such a comparison proves that diseases of the brain occasion a defect of memory, which is but an exaggeration of that observed in old age and in inebriety; and it is, therefore, to be attributed not to the affection of any particular portion of the brain, but to a general derangement of the cerebral functions. Some medical men are inclined to think that where, under such circumstances, the memory is very deficient and the intellect weak, softening of the brain exists; but the preceding observations show that such a conclusion is derived from a very partial view of the subject, inasmuch as the patient, whose case I have first referred to, is still living, and is much in the same state that followed the paralytic stroke eleven years ago.

The effects produced on the memory by paralysis are by no means proportionate to the loss of muscular power that the disease gives rise to; and the same disproportion exists also with respect to the generative powers. Thus I have known several cases in which young men who were attacked with apoplexy and hemiplegia, from which they recovered with a very imperfectly restored muscular power of the limbs and speech, became subsequently the fathers of several healthy children. On the other hand I have seen two cases where the cerebral attack was so slight as not to produce more than a transitory giddiness, a passing feeling of terror, and some hesitation of speech, with a little subsequent numbness in the arm and cheek, and slight weakness of the leg at the same time. All these palpable symptoms passed away within twenty-four hours, leaving behind scarcely an evident trace of diminished power in the limbs, and no impairment of any of the senses, articulation or memory; yet the cerebral attack occasioned, from the very moment of its occurrence, a complete impotency, which in both cases has been for many years permanent, although, as I have said before, both individuals are in other respects quite healthy.—*Dublin Quar. Jour. of Med. Science.*

A CASE OF TRAUMATIC TETANUS, AND RECOVERY.

BY THEODORE S. BELL, M.D., OF LOUISVILLE, KY.

A YOUNG man, named John Varali, aged 22 years, called at my office, in the latter part of October, on account of a severe wound of the

hand, which had been inflicted with a circular saw. The thumb was severely cut; the first bone being crushed into fine spiculæ, and two of the fingers were injured in a less degree. Feeling anxious to save the injured members, I dressed each one with the roller bandage. The hope of success did not rest upon a very firm foundation, for the young man had been unhealthy from infancy. He has for many years been subject to a singular species of chorea. But the wounds referred to seemed to do very well for some days, and the treatment, by the bandage, was continued for two weeks. About the end of that time, the thumb was threatened with gangrene, and, in spite of quinine, wine, and nutritious diet, the end of the thumb was destroyed by mortification. But at the point of separation healthy pus was found, and the condition of the granulations was promising. Fomentations were constantly applied to the thumb for several days, but trismus manifested itself in the third week of the wound. The fingers were entirely healed at the time the trismus commenced. The trismus was accompanied by all the symptoms that are usually present in such cases. The jaws were rigid, the tongue stiff, the deglutition of liquid, even, was a matter of great difficulty, and there was stricture of the chest.

After the spasmodic condition of the jaw was well established, emprostotonos and opisthotonos manifested their presence by unmistakable signs; and in a considerable experience with tetanus, I have never seen these convulsive actions as constant and severe in any other case. There were times when the face of the patient was drawn nearly to his toes; at other times the back of the head was thrown nearly to the heels. The convulsive action was so great that a table standing near the patient was often thrown across the room, by the sudden accession of a spasm. The patient sometimes sat in a large rocking chair, and was held in it during the spasm; at other times he sat on a lounge, near the partition wall, and the opisthotonos was so violent that a hole was broken through the partition, on one occasion, by the backward movement of the head. The sufferings of the patient were beyond anything I have ever witnessed. He had no rest day or night, and for weeks neither the trismus, the opisthotonos nor emprostotonos seemed to yield in any degree.

In the early part of the tetanic features, my own sufferings with a carbuncle on the left hand were so great, that I was compelled to request Prof. J. B. Flint to take charge of Varali for me. He very properly ordered a solution of the extract of the *Canabis Indica*, in doses of $2\frac{1}{2}$ grains of the extract, every two or three hours. Dr. Flint was impressed with the belief that this extract was of some service, and when I resumed the treatment of the case, I continued it. But for a considerable length of time I saw but little if any mitigation. The spasms were as frequent, and seemed to be as violent as at any time of their career while under my observation. Partial ease was obtained for a short time, immediately after the action of purgatives. The constipation was unusually great, even for a case of tetanus. On this account I abandoned all the ordinary preparations of opium, and resorted to Mc Munn's elixir. At the same time I doubled the dose of the *Canabis*

Indica. By purging the patient freely, in the afternoon of almost every day, and the use of the elixir at night, I was able to procure him some sleep, and he often slept several hours at a time. The spasms were less frequent, but were not mitigated in their violence, nor did the trismus abate in any degree. The emprostotonos was the first variety of the spasms that disappeared, and at the end of four weeks from the commencement of the tetanic attack, the trismus and opisthotonos were considerably mitigated, and finally disappeared.

Throughout the whole of this attack the patient was actively treated. The wound was regularly dressed with warm poultices, and sometimes with the addition of laudanum to the poultice. The patient was a member of the Washington Fire Company, and was, of course, well nursed. His family were unremitting in their attentions. All that could be done by medicine, was done; all that faithful and judicious nursing could do, was freely rendered. The strength was supported by nourishment adapted to the case, and wine of a superior quality formed a leading element of the nourishment. In the repeated efforts to give the sufferer sleep by the use of narcotics, the constipation that naturally belongs to tetanus was increased, and all the ordinary preparations of opium were abandoned on this account, and with the less regret from the fact that they seemed to render no service to the case. I am not prepared to say that much was done, in controlling the tetanus, by the *Canabis Indica*, while in my charge, though I faithfully used it up to the termination of the case. There were times in which it was not given for twelve or sixteen hours, and the evils were not increased by the omission. But a neglect of purgatives invariably aggravated the spasms, and their action was always followed by decided mitigation for irregular intervals of time. The elixir of opium, also, usually gave ease, and was generally followed by some sleep.

Throughout the whole of this tetanic attack, the wound of the thumb remained stationary. It seemed to grow neither better nor worse, during the existence of tetanus through its term of four weeks, and I continued to dress the wound for more than a month after the tetanus had disappeared. The thumb is now well, with the loss of the first joint.

I have called this a case of tetanus, because all the symptoms of that malady were present in a marked degree. But it is possible that the attack may have been an aggravation of the long-standing chorea, and may have simulated tetanus, or the chorea may have exerted some influence on the tetanus. The trismus came on more sluggishly than usual, but I have seen considerable varieties in this feature. I have seen it come in all its fulness at the very onset of its appearance, and I have seen it develope itself gradually, but never so slowly as in the young man whose case is under consideration. The recovery of this patient surprised me very much, as it did everybody who knew anything of the case.

In presenting a portraiture of this remarkable case, it is proper to mention that some five or six years since, I attended young Varali in a case something like the one recorded above. He was suffering then from a wound, and had well-marked tetanic symptoms, from which he

recovered much sooner than from the recent attack. I entertained no doubt about the tetanic character of the first attack, nor do I know that there is much reason for a doubt about the second.

It is gratifying to add that the health of the subject of these remarks is much better since his recent recovery, than I have known it to be for ten years.—*Western Jour. of Med. and Surg.*

CASE OF STRANGULATED HERNIA.

BY JOHN TRAILL, ESQ., SURGEON TO THE ARBROATH INFIRMARY.

WEDNESDAY, Jan. 1, 1851.—This morning, at 5 o'clock, I was requested by my friend, Mr. Finlay, to visit David Shuld, a seaman, aged 60, who had been brought ashore from a ship, about four hours previously, with all the symptoms of strangulated hernia. Mr. Finlay had seen him shortly after he had reached his home, and had made a persevering attempt to reduce the hernia, but without effect. The man's statement—which was rather confused—was, that for many years he had labored under hernia, for which he had worn a truss; but that the tumor frequently came down, and was returned on several occasions with difficulty, and after having caused symptoms resembling his present attack; that on Monday forenoon (Dec. 30), feeling costive and unwell, he had taken a dose of castor oil, which had acted three times; that the same evening, about 9 o'clock, whilst engaged in the ship's rigging, he had felt the tumor come down suddenly; that he immediately became sick, and vomited, and had been in great agony ever since.

He was evidently in great pain, his pulse small and wiry, the whole surface of the body cold and damp (he had not been able to change his wet clothes for two days and nights before coming ashore); but his countenance was not much sunk, nor his muscular strength much lessened. The belly was hard, tense and tympanitic; but without much tenderness on pressure. He complained of intense sickness, and had frequent retching and vomiting of bilious-looking matter, with dragging pains about the navel, and constant thirst.

The hernial tumor occupied the right side of the scrotum, and was fully the size and about the shape of a *bon chretien* pear, of twelve ounces or a pound weight, having the testicle at its lower part, and feeling very tense, but with no great degree of tenderness.

We placed him under the full influence of chloroform, which produced complete relaxation of the muscular system, and the taxis was again tried. At first it seemed as if the tumor would be easily reduced, a considerable part of its bulk apparently passing up, but immediately returning on the withdrawal of pressure.

He was now directed to be sent to the Infirmary, and placed in the warm bath as soon as possible.

About 9 o'clock he was seen by Dr. Bruce, who, after keeping him for about half an hour in the bath, again placed him under chloroform, and attempted reduction, without effect.

At 10 o'clock, the symptoms continuing unmitigated, it was resolved,

in consultation, to operate. On cutting through the integuments, the fascia and cellular substance were found much thickened, matted together, and infiltrated with serum, and at several points with air. The sac was strongly and uniformly adherent to the parts around, was very tough, and much thickened, being at no point less than a line, and at one part at least half an inch, in thickness. On making a small opening into it, a stream of yellow, turbid, and very fetid fluid was thrown into the air with great force, and this continued to flow until at least ten or twelve ounces were discharged. On a careful examination I now became convinced that the sac was empty, at least of any solid body; and, on introducing a director through the opening, it passed without any obstruction through the inguinal canal into the abdominal cavity. From these circumstances, and the large quantity and nature of the fluid passed, some of my colleagues were of opinion that the part opened *might* prove to be intestine.

Although satisfied in my own mind, from the color, density, toughness, great and unequal thickness, and uniform adhesion to the fascia, that the part opened must be the sac, yet, being also satisfied that it contained neither omentum nor intestine, it was agreed to place a ligature on the small opening, and, after closing the wound with sutures, to wait for some hours the result.

In the evening—no relief having resulted from the operation—the wound was opened up and the sac cut into, which, from its structure and smooth serous surface, was now evidently seen to be thickened peritoneum. The finger could now be passed without difficulty through the neck of the sac into the abdominal cavity, and there encountered what felt like a mass of omentum, and adhered slightly to the peritoneal surface.

The man died the same evening, about 10 o'clock, after having vomited a large quantity of stercoraceous matter, and without any abatement of his sufferings.

On opening the body next day, we found the appearances usually presented after death from hernia—considerable effusion of turbid serum, the intestines agglutinated together by soft, fibrinous matter, and the whole abdominal viscera indicating, in greater or less degree, the existence of inflammatory action. Immediately corresponding to, and lying loosely over, the internal orifice of the sac and inguinal canal, was a portion of the ileum, in a completely sphacelated state, about three inches in length, and its margin sharply and regularly defined, so as to indicate accurately the line of constriction. The serous surface of this part had lost its smoothness and elasticity, and the mucous membrane was soft and pulpy, and so much thickened as completely to close up the canal. Above this part, the intestine was, as usually seen, enormously dilated.

Remarks.—The opinion which I formed of this case at the time of the operation, from the phenomena which presented themselves during its progress, was, that the part strangulated must have passed up during some of the attempts at reduction; but that the morbid action was so far advanced as to have prevented any relief being derived from the re-

moval of the strangulation. This view, I think, the post-mortem examination proves to have been correct.

It was also evident, from the appearances presented both during the operation and on dissection, that the hernial sac had been irreducible for a long period, probably for many years; and, on minutely inquiring into this, we found that, although a strong circular truss had been constantly worn up to the commencement of the attack, the right side of the scrotum had always remained considerably enlarged.

The constant pressure of this strong truss over the unreduced sac will also account for its strong adhesions to the fascia, and for the congested and infiltrated state of the surrounding cellular tissues. The circumstance of our being able, during the attempts at reduction, to lessen considerably the bulk of the tumor, led probably to a longer delay of the operation than would otherwise have been the case.

The more I see of hernia, the more strongly am I convinced that all danger lies in delay; from the operation itself I have never seen the smallest danger result.

Notwithstanding this apparent reduction in bulk during pressure, yet the instant pressure was withdrawn, the tumor resumed its former size, and at the time of operation it was as large, and felt as tense, as it ever had been. This, and the persistence of all the symptoms, rendered it impossible to suspect reduction of the strangulated bowel.—*Edinburgh Monthly Journal of Medical Science.*

ON INHALATION OF VARIOUS MEDICINAL SUBSTANCES.

[At a late meeting of the Medical Society of London, Dr. Snow read a paper on inhalation. From a report of it in the *Lancet*, we copy the following.]

He said, that previously to the discovery of etherization, medicines had rarely been inhaled, except with a view to their local action; but that there was no more reason to limit inhalation to pulmonary diseases, than to restrict the exhibition of medicines by deglutition to affections of the stomach and bowels. He admitted, however, that the proper administration of medicines by inhalation was attended with much greater difficulties than their exhibition in the usual way. The chief object of his communication was to point out the manner in which certain medicines could be inhaled. According to their different physical properties, they might be inhaled either with or without the aid of heat; and when heat was employed, they might be inhaled either in the dry way, or with the vapor of water. The fumes expelled by heat from the extracts of opium, stramonium and aconite, were inhaled dry. Ammoniacum and other gum resins could be inhaled either in the same way, or with vapor of water. Turpentine, creosote, camphor, iodine and benzoic acid, had been conveniently inhaled along with watery vapor, by placing the dose of medicine to be used in about half an ounce of water, which was heated by the flame of a spirit lamp. Several of these medicines had also been inhaled at the ordinary temperature of the air, without vapor of water, as also had ammonia, hydrocyanic acid and chlorine. For drawing ni-

trate of silver into the larynx in the form of powder, the bowl of a pipe, with a glass tube fitted into it, was used. A grain of nitrate of silver, finely powdered with five grains of loaf sugar, was inhaled, by a strong inspiration, once a-day. The sugar was recommended by a French author for diluting the agent, and had an advantage over lycopodium powder and similar substances, which, not being soluble in the mucus of the air-passages, caused irritation. At the hospital for consumption at Brompton, the physicians to which institution had invited Dr. Snow to assist in contriving and superintending the inhalation of medicines, opium had been inhaled by a considerable number of phthisical patients, generally with marked benefit. Relief had also been obtained from several other medicines; but the inhalation of iodine and chlorine had apparently not been attended with any advantage. It might not be uninteresting to mention that, while four patients were inhaling chlorine twice a-day, in the summer of 1849, two of them were attacked with cholera, they being the only patients in the hospital that were attacked with it at the time. As chlorine can be smelt exhaling in the breath for hours after the patient has inhaled it, he thought that this occurrence was opposed to the hypothesis that the diffusion of chlorine in the air had the power of limiting or preventing the spread of cholera. It was not his intention to treat of the inhalation of chloroform on the present occasion; but having been speaking of pulmonary affections, he might state that he had never seen chloroform fail to relieve an attack of spasmodic asthma in any case in which it had been inhaled.

In the discussion which ensued, several fellows took part. The views advanced were generally in support of the opinions expressed by Dr. Snow, whose labors on the subject of the inhalation of medicines were spoken of with much commendation.

TREATMENT OF THE BITES OF POISONOUS REPTILES.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Struck with the very inefficacious treatment I see employed in the United States in bites of poisonous snakes, I wish to indicate the more active and efficient treatment I have used for twelve years past in this country, for bites of those dangerous reptiles so very abundant in this quarter of the world.

1. I observed the inefficiency of the guaco, raiz de largatigo, alkali, &c. &c., in most of the severe cases, and therefore sought for better means.

2. Observing the action of the poison of snakes on the human system, I became convinced that it acted more directly on the albuminous parts of the blood, dissolving it completely, and rendering it perhaps more permeable than water; thus the exudation of the fluid (the blood dissolved) through all the openings of the mucous membranes, even through the pores of the skin.

3. I considered then, that the remedy which would act quickly in opposing this dissolution of the albuminous portion of the blood, and even in-

crease its elasticity, would certainly cure all bites of snakes, if employed properly and in due time.

4. This remedy I found to be "mercury," whose action on the system, at first, is to increase and thicken the albuminous part of the blood.

5. I therefore use frictions of strong mercurial ointment over the spine, on the sides of the chest, and the inner parts of the arms and thighs—these frictions to be repeated even every hour in dangerous cases.

6. On the rest of the whole surface of the body, frictions are to be used of alkali and sweet oil, mixed with camphor.

7. Inwardly, in pills or powder, every one, two, three or four hours, according to urgency, and at each dose:—From 2 to 8 grains of calomel; from 2 to 10 grains of sulphate of quinine; from $\frac{1}{4}$ to 1 grain of musk; from $\frac{1}{4}$ to $\frac{1}{2}$ grain of camphor. The doses adapted to the nature of the case, and continued till the cure is obtained.

8. I always have the bite sucked, or cups applied, and immediately after the actual caustic applied as deep as possible. Soon after this, I keep on the wound, pure warm spirits of turpentine, to excite the supuration of the parts, alternately with poultices wetted with the same spirits, according to the state of the parts.

9. Always a moderate ligature or compression to be applied between the heart and the wound.

10. The above treatment to be repeated over and over again, and followed even for several days, if the alarming symptoms continue.

11. With this treatment I have saved all those I have been called to treat; even some very desperate cases, in which I began late, recovered by this treatment, energetically pursued, which thus succeeded in arresting the dissolution of the blood.

In haste, I remain respectfully, A. LACOMBE,
Feb. 8, 1851. Port Physician Puerto Cabello, Venezuela.

THE MASSACHUSETTS STATE RECORD—ADDRESS OF PHYSICIANS IN THE COUNTRY.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—My attention has been attracted to two paragraphs, in the last two numbers of the Medical Journal.

In the last number, is a paragraph copied from the Daily Times, in which it is stated that "Dr. Edward Warren, of Waltham," was appointed Treasurer of the Middlesex County Medical Society.

Upon referring to the Massachusetts State Record, noticed in the preceding number of your Journal, I find the names of "Dr. R. S. Warren, Waltham," and "Dr. Edward Warren, Newton." The names of at least four medical gentlemen, all in active practice and of regular standing, two in this village, one at West Newton, and one at Newton Corner, are not mentioned at all in the "Record"; thus affording a strong instance of the value of your suggestion with regard to the expediency of obtaining a correct list.

Would it not be a sufficient object for the Massachusetts Medical So-

ciety, in the proper time and place, to instruct the Secretaries to prepare yearly such a list as you mention, in which the address of each of the members should be correctly ascertained and recorded? This list might be offered to the editor of the Massachusetts "Record," or any similar work, for publication in such a manner that the Medical Society should have a place by itself; as was formerly the case in the "Register." Thus the feelings of the *other* practitioners will be spared, and they may hold the post of honor by themselves.

With the exception of merchants in large cities, professional men receive more letters and papers of various kinds, than any other class in the community. It is, therefore, very important for them to see that, if their names are published in registers and directories, their address is given correctly.

The blunders frequently made, and the carelessness used in directing properly, are astonishing. I have heard, upon very good authority, of a reverend gentleman who holds his D.D. by virtue of a mistake in his christian name, the university who conferred it having intended it for a different person, whose name they neglected properly to ascertain. I have known also an individual receive and appropriate a commission as justice of the peace, intended for some one else. In each case they were tenaciously retained, and the conferring powers thought it best to submit to the assumption, rather than provoke hostility or draw attention to their blunder by strong measures. In the last case, and I presume in the former, the injury was repaired to the aggrieved party.

The directions "Cambridge," "Roxbury," "Newton," &c., are, for all practical purposes, as indefinite as "U. S. America" or "Massachusetts." In the town of Newton, for example, there are five post-villages, as distinct from each other as separate towns. If a notification is directed to A. B., Newton, it goes to Newton *proper*, thence it is returned to Boston, and may be forwarded four times, reaching its final destination with quadruple postage (if not detained more than one day in each place) in five days, and long after it has ceased to be of any value.

As this increases the revenue of the post office, it is not the duty of the post-masters to assist in removing the difficulty. I believe that in England an individual, by leaving his address at the General Post Office, may have his letters forwarded to any part of the kingdom; but I am informed that this cannot be done here, because the clerks read merely the name of the town, and not the whole address. For a similar reason, if one part of the name of the place is below the other; for instance, if Upper Falls is written above or below the word Newton, the clerk catches merely the latter word and mails it to Newton *proper*.

Respectfully yours, E. W., *Newton Lower Falls.*

GLYCERINE IN DEAFNESS.—Glycerine still continues to be used in England in the treatment of certain cases of deafness. Thos. H. Wakley, Esq., Surgeon to the Royal Free Hospital, reports a number of successful cases in the *Lancet*. It is found particularly useful in deafness following eruptive and other fevers.

 THE BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON, MARCH 12, 1851.

EDITORIAL CORRESPONDENCE.

Philæ, Nubia, Dec. 10th, 1850.—If accounts here are to be credited, disease is scarcely known at this extreme point of travel. There is not a medical practitioner for 200 miles, except the surgeon of the barracks. Blindness is not quite so frequently met with as in the lower parts of Egypt; still I have seen many adults and children with opacity of the cornea. A case of paralysis of the face, and one of scrotal hernia in a boy, who replaced or protruded the sac at pleasure for the sake of backsheish, were met with. A tall, finely-developed Arab consulted me respecting his wife, who vomited her food immediately after eating. Among all the Abyssinians whom we saw from the slave marts, not one had an apparent physical defect. Two years ago the plague raged up and down the river, cutting off the poor people at a melancholy rate, even above the first cataract, it being generally developed in and confined to Cairo and the large towns below. Not a case of cholera the present season appeared above Cairo. In that dusty, barren, closely-packed city of not far from 200,000 inhabitants, it has been estimated that 8,000 died while the epidemic prevailed. At Alexandria, it is asserted that 300 often died in a day, and that 5,000 were swept off by it in the course of a few weeks. It had not wholly subsided when we arrived there.

In returning down the river from the cataract, we stopped to see and consider each and every object worth noticing—enough, indeed, to keep a calm man in a constant state of excitement. No country can boast of such antiquities—none has such historical monuments. It has been to us a long, tedious and expensive voyage; but we have had the gratification of roaming over and through temples and ranges of tombs, and climbing pyramids, made long before the birth of Abraham—of standing at the foot of the colossal mountains of hewn stone at Geeseh, where Moses, Plato and Pythagoras once stood and gazed. My diary can no longer be introduced into letters, even abridged; but by every conveyance I shall write the principal events of my travels from Cairo through the Desert to the Red Sea, and from thence through Palestine, a part of Syria, Turkey and Greece.

Should some of our enterprising stone masons travel through Egypt, they would discover the mortifying fact, in the quarries of Silisis, that were extensively wrought nearly 4,000 years ago, and in the granite beds at Syene, that a skill in stone-cutting was then practised which is unknown at the present day. At Thebes I have gazed with astonishment at the enormous blocks that were transported from their native beds, down the river, to their present position. At the Temple of Ombus there are blocks of hewn stone 20 feet long by 8 feet square, which must have been carried up a high bank of the river before being elevated to their place in the building. Think of the roof of a large public edifice, made of solid pieces of granite 5 feet square and 15 feet in length, lying side by side. All the stones, small or large, were dowelled together with a piece of wood, each way. The surface of a stone designed to have another upon it, had a rough depression in it for mortar. Wooden dowels, excluded from the air, will

last for ages. After seeing them as they were used in walls here in Egypt, that are now firm as the everlasting hills, and which have witnessed the wrecks of empires and the convulsions of nature during several thousand years, I think they are quite as good as copper, superior to iron, and worthy of imitation in our country. In some exposed walls, liable to be weakened by running water, the dovetails of wood would tug like giants to keep the stones from separating. The ancient stone-cutters had long chisels not exceeding half an inch in width. This is shown by the strokes in the stones of all the ruins examined, from the fallen pillars at Alexandria to the tablets, architraves and suspended chapiters in Ethiopia beyond the boundaries of Egypt. Our ship carpenters, too, might obtain important hints on the Nile. No better hulls can be put together than are found here. Some, quite large enough for schooners, are made of bits of plank not more than three feet long by one foot four inches wide; but a compensation for this apparent defect exists in an almost solid wall of ribs, side by side, of locust-wood—called here tamarask—the shittim-wood of the Old Testament. Decay is out of the question in their boats. Every plank or piece of one is fastened with a headed iron spike, the heads entering the wood to a common level, and tow being wound around under the head, the thickness of the board it is to hold in place. Of other mechanical matters, my journal has copious details.

Within an hour I have visited the great citadel temple of Edfou, the ancient Apollonopolis—the propyla or gateway towers of which are probably 100 feet high each, by 90 feet in width at the base, and yet the cap course of stone is gone. The pillars within cannot be matched, out of Egypt, for massiveness and beauty. The door of entrance between the towers is much like the granite entrance to Mount Auburn, only more lofty. A wall, unique for strength, height and finish, surrounds the once sacred ground, where the cunning old heathen priests, secured against the assaults of political foes, as they were from vulgar eyes, imposed upon generation after generation of men. There are sculptures, cartouches and hieroglyphics, with fine specimens of coloring, on the walls. The wall within, nearly 50 feet high, is also full of them, to near the top, concealing of course the body of the magnificent pillars and elaborately ornamented chambers. If cleared out it would be found, I suspect, one of the best preserved temples in the valley of the Nile. I there likewise observed the system of dowelling the stones with wood, to keep them from spreading apart. The columns appeared to be dressed after being placed, as were also the walls of the apartments. The same thing was observed at Philæ, where several of the columns were left, half finished, with the chalk marks that were to be the guides for the workmen.

Thebes, Dec. 13th.—At 3, P. M., having completed a thorough examination of the ruins, and everything surprising and grand in ancient Egyptian architecture; at Luxor, Kanah and Thebes, our boat has again been turned towards Cairo. If the temples visited excited my profound astonishment, what a strange sensation was produced on entering the ancient tombs, excavated into the rocky sides of a mountain, nearly as long as the Quincy Market in Boston, and half as wide, comprising a succession of beautiful apartments, with occasional arched ceilings and columns, and paintings that have now been executed more than 2,000 years. At the extremity of the tombs were granite sarcophagi, that in themselves, on account of their immense size, are wonders of mechanical ingenuity. To describe a tithe of what has been seen in these royal sepulchres, illustrative of the skill,

mechanical adroitness and power, of the artisans of Egypt 1,800 years before the commencement of the christian era, would be an interminable and unsatisfactory labor, and therefore will not be attempted.

Yesterday a regular Egyptian serpent-charmer waited upon us, on our return from the tombs of Bruce and Belzoni, and inquired for the *hakeem*, or doctor, whom he understood was in the company. On presenting myself, he said he was himself a hakeem—shook hands, and muttering to himself awhile squatted down to a kind of eel-pot-shaped basket—and opening the cover, thrust in his hand and drew out a snake resembling an adder, about a yard in length, the head of which he immediately thrust into his mouth, and kept crowding in, fold after fold, till no more could be received, when he drew it out. He had five snakes, of different sizes, which were handled with a freedom which made one's hair crawl. The minutiae of the exhibition it is unnecessary to describe. Few, it is said, possess the secret of this influence over these reptiles. He assured me he could make any serpent in a field leave his hole and run directly to him—and would handle them with perfect impunity, no matter how poisonous they might be. His son, a little boy, he said could do the same.

Analyses of the Solids and Fluids consumed by all Classes of the Public.—A series of analytical examinations has been and is now being made in London, of the various solids and fluids which are used by "all classes" of the public. We are uninformed how this sanitary commission was appointed, nor do we know the names of the scientific gentlemen who compose it; but it is evident that many strange developments of fraud have already been discovered by the commissioners. Their report, so far as they have extended their researches, is published in the London Lancet, from which we make a synopsis. It commences with sugar and its adulterations. Mention is made of the various kinds, elements, &c., which it is deemed unnecessary now to speak of—our intention being to allude only to the impurities and adulterations of cane sugar. These consist of organic and inorganic matters. The organic substances are fragments of the sugar cane, glucose or grape sugar, vegetable albumen, blood, an animalcule peculiar to sugar, fungi, woody fibre, and starch granules. The inorganic impurities are lime, lead, iron and earthy matter. These several impurities are not found in the crystal parts of the sugar, which are pure cane, but in the more fluid part which surrounds, adheres to and coats them. The crystal sugar possesses by far the greatest sweetening properties, and is less prone to undergo the fermentive changes; while grape sugar, on the other hand, is of less sweetening power, and is quite apt to ferment. In the brown sugars there is much vegetable albumen, which increases its weight, and also its liability to ferment; but what will astonish, and perhaps most alarm the consumer of sugars, is the fact of the unrefined qualities containing more or less of *animalcule*. To Dr. Hassall, the scientific world are indebted for this discovery; with the microscope he was enabled to detect mites or acari, not unlike the itch-insect, and from their microscopical appearance we should judge them to be a more formidable animal. These insects were found in *raw or unrefined* sugars, the place where these are prepared not exempting them from the liability. By this discovery of Dr. Hassall, that affection of the skin, called *grocer's itch*, is accounted for, for it is well known that that class of traders are very liable to extreme irritation of the skin, and it is generally in those who

handle the sugars largely. There are also sporules of fungi discoverable in the impure sugars, which are supposed to favor the development of the *acari*. Starch was found in almost every sample of sugar examined; also woody fibre, lime, lead, iron, and stone grit. *In thirty-six samples examined by the microscope, thirty-five had the disgusting-looking acari in them*; also, all of these samples contained more or less of impurities and adulterations. The commissioners came to the conclusion, from the abundant evidence adduced, that a *majority* of the brown sugars, as imported and sold to the public, are *impure*, and in a state generally "*unfit for human consumption*." The refined sugar is therefore recommended to consumers, as the only kind proper for use, and they should be willing to pay a fair price for it. In our next number we shall speak of **ARROW ROOT** and its **ADULTERATIONS**.

Diseases of Menstruation.—"On Diseases of Menstruation and Ovarian Inflammation, in connection with Sterility, Pelvic Tumors, and Affections of the Womb. By Edward J. Tilt, M.D., London.—New York, Samuel S. & Wm. Wood, publishers. Boston, Ticknor & Co." The author has certainly given us much that is new and interesting in his little volume. It is written with great care, and furnishes evidence of a mind well cultured. With all Dr. Tilt's theories, it cannot be expected that every one will be pleased; but in the main, they will be found tenable. The diseases peculiar to menstruation, have always been considered very obscure, and the organs concerned in this function have never been satisfactorily defined. This work may be considered the best that has been published on the subject, and it must fill a space in medical literature which has heretofore been void. In his introduction, he says—"If, then, it be established that the ovaries govern menstruation, it is reasonable to study the disorders of menstruation in connection with the diseases of those organs, so that we may have some connecting link in the investigation of these important diseases, and be able, in many instances, to direct our treatment to that organ which all recognize as the fountain head of menstruation; and as we ascribe to inflammation so great an influence in disturbing the functions of the ovaries as to produce diseases of menstruation, we must question ourselves respecting the occurrence and phenomena represented by this most important word."

The Journal of the Society for the Prevention of Pauperism.—We have received, from the board of managers, the February number of the above-named monthly, published in this city. It is filled with interesting matter upon the subject of pauperism. From the report of the secretary, it appears that more than three-fourths of the applicants for situations were *foreigners*. It seems to us a mistaken policy in our government, to encourage emigration to this country, when we are suffering so much from the increase of pauperism caused by it. The law which was enacted by our legislature, requiring head money to be paid by the alien, and bonds, with sufficient surety, that he would not become a burthen to the State for a certain time, seemed just and proper; yet we believe it was decided to be unconstitutional by the Supreme Court of the United States. Until our own poor are properly cared for, we do not think we are called upon to render assistance to the poor of other countries. We wish the Society for the Prevention of Pauperism all success in their philanthropic undertakings.

Graduates of the Medical School of Harvard University.—At the semi-annual examination held on the 6th of March, 1851, at the Massachusetts Medical College, the following candidates were examined and approved for the degree of Doctor of Medicine :—

Enoch Adams, Andover, Me., Thesis on *Pneumonia*.

George Pierce Baker, Providence, R. I., *Relation between Erysipelas and Puerperal Fever*.

James Coldham, Simcoe, Canada W., *Intermittent Fever*.

William C. B. Fifield, Weymouth, *Puerperal Convulsions*.

Richard Gundry, Simcoe, Canada W., *Medical Evidence*.

George Asa Hoyt, A.M., Framingham, *Dysmenorrhœa*.

William Albert Lewis, Sterling, Ct., *Causes of Peritonitis*.

Jenks Harris Otis, Boston, *Urinary Calculus*.

William Samuel Pattee, Quincy, *Ascites*.

Francis Tuttle, Barnstead, N. H., *Continued Fever*.

O. W. HOLMES, Dean.

Rhode Island Medical Society—Delegates to the American Medical Association.—At the last semi-annual meeting of the Rhode Island Medical Society, the following gentlemen were appointed delegates to the meeting of the American Medical Association in May, 1851 :—Drs. Usher Parsons, Theophilus C. Dunn, Joseph Mauran, George Capron, Ezekiel Fowler, S. Augustus Arnold, David Holmes, Henry P. Pratt, Charles H. Fisher and Absalom P. King.

Report of the City Registrar of Boston.—This document, as prepared by Mr. Simonds, our efficient City Registrar, is beginning to take the place which it deserves among the annual statistical reports of the day. His report for the last year, just published, contains all the information which could be desired respecting the important matters which come under his observation. We glean from it a few particulars, and may perhaps refer to it again.

The number of births registered during the year was 5279 ; viz., 2681 males, 2598 females. Among them were 53 cases of twins. The birth-places of the parents of these children were as follows :—Boston—fathers, 456 ; mothers, 535. Massachusetts, except Boston—fathers, 533 ; mothers, 501. Total New England—fathers, 1704 ; mothers, 1741. United States, except New England—fathers, 122 ; mothers, 119. Ireland—fathers, 2734 ; mothers, 2792. Total foreign countries—fathers, 3340 ; mothers, 3320.

The number of intentions of marriage registered was 2557, one or both of the parties being described as residing in Boston. Of these, were natives of the United States—males, 1160 ; females, 1153. Of Ireland—males, 999 ; females, 1099.

The whole number of deaths registered was 3667—being about 1400 less than in 1849, the cholera year. The deaths last year were 1 in 38, or 2.64 per cent., instead of 1 in 26 as in 1849. The ages were as follows :—under 1 year, 879 ; 1 to 2, 439 ; 2 to 3, 194 ; 3 to 5, 194 ; 5 to 10, 165 ; 10 to 15, 68 ; 15 to 20, 131 ; 20 to 30, 475 ; 30 to 40, 369 ; 40 to 50, 246 ; 50 to 60, 175 ; 60 to 70, 157 ; 70 to 80, 108 ; 80 to 90, 49 ; 90 to 100, 17 ; over 100, 1. Consumption was the cause of 586 of the deaths.

The following extract is given, that our more distant readers may understand the cause of so great an increase in the foreign population of Boston, as is shown above and in our weekly report of deaths in the city.

"The multiplied facilities for rapid travelling have made it practicable and convenient for the business men of Boston to live out of town, and thousands of them have within a few years established their family residences near the various railroad stations and omnibus routes within ten or fifteen miles. Their warehouses, stores, shops, and employees, remain in the city. Our native population has been also considerably affected by the numbers who have left, seeking a golden harvest in California. It is within the last five years, that the tide of emigration from Europe has set strongly to Boston. Previously we received directly a much smaller proportion, of a less emigration. While the greater part of the emigrants landing in Boston, proceed directly to the interior of New England, or the Western States, many remain, including generally the most undesirable portion."

Mortality of Lowell in 1850.—A statement of the deaths in Lowell, with the diseases and ages, as prepared by Dr. J. Spalding, City Physician, has been received. From it we learn that 492 persons died in that city during the year, 219 of whom were males, and 278 females. Nearly one fourth of the deaths were caused by consumption, and two thirds of them were females. The greatest mortality occurred in August, when there were 62 deaths. We should judge the city to have been exempt from epidemical diseases, and to have enjoyed an unusual degree of health.

The Stethoscope and Virginia Medical Gazette.—This new medical journal, conducted by Dr. P. C. Gooch, of Richmond, Va., has materially improved since its first number was issued. The March number has been received, and contains much interesting and practical matter. With its abundance of original material, and a good judgment in selecting other matter; and last, not least, the spirited manner in which the editorial department is managed, the Stethoscope cannot fail to secure a host of readers. We wish it all success, and welcome it among the best of our exchanges.

Physician for Ships.—It will be seen by our advertising sheet that a new edition of Dr. Parsons's book for seamen, and others who have occasion to travel by water, has been published. The work is too well known to need more than a statement of a new edition being issued.

MARRIED,—In Rochester, N. H., Dr. James Farrington to Miss Harriet Chase.

DIED,—At Hampstead, N. H., Dr. E. H. L. Gibson, aged 23.—At Newburyport, Mass., John Merrill, M.D., aged 30 years, a graduate of Harvard University.

Deaths in Boston—for the week ending Saturday noon, March 8, 77.—Males, 39—females, 38. Abscess, 2—accidental, 1—anæmia, 1—asthma, 1—disease of the bowels, 1—inflammation of the bowels, 2—burn, 1—consumption, 13—convulsions, 1—croup, 3—debility, 1—dysentery, 1—dropsy, 1—dropsy of the brain, 3—erysipelas, 1—typhus fever, 2—lung fever, 8—hooping cough, 2—disease of the heart, 2—infantile, 2—disease of the liver, 4—inflammation of the lungs, 5—marasmus, 1—measles, 9—old age, 2—palsy, 2—puerperal, 1—disease of the spine, 1—smallpox, 1—unknown, 2—worms, 1.

Under 5 years, 35—between 5 and 20 years, 5—between 20 and 40 years, 15—between 40 and years, 12—over 60 years, 10. Americans, 44; foreigners and children of foreigners, 33.

Animal Food in Dysentery. By R. J. GRAVES, M.D.—In an excellent paper by Dr. Mayne, published in the last number of this Journal, some judicious remarks are made respecting the utility of tender animal food in dysentery, after the first stage of active inflammation has passed, remarks strongly corroborating what I have already written on that point of practice, and the accuracy of which is confirmed by the following passage, taken from a very interesting work entitled "The Shoe and Canoe," by John J. Bigsby, M.D. "Donkin's preserved meat is an admirable substitute for the recently-killed animal. A transport between the tropics, full of soldiers and their families, under my medical charge, became generally attacked with dysentery, *against which medicine seemed powerless.* In the course of three or four days I distributed among the soldiers 750 pounds of Donkin's preserved meat, and the disease ceased. We landed six weeks afterwards at the Cape of Good Hope, a sound ship."—Vol. II., p. 203.—*Dublin Quarterly Journal of Medical Science.*

Saline Artesian Well.—The boring of the famous artesian well, the Schonborn, at Kissingen, in Rhenish Bavaria, which commenced in 1822, has recently been brought to a successful termination. This immense work, of the success of which people were beginning to despair, has given results never witnessed before. Kissingen is situated in a saline valley about 990 feet above the level of the Baltic. In the month of June, 1849, after seventeen years of work, the boring had reached a depth of 1820 feet, having previously passed through several strata of salt separated by masses of granite. There was then encountered, for the first time, a stratum of carbonic acid gas, followed by new granitic masses, and at length on the 12th of June a violent detonation overthrew, but without injury to anybody, the scaffolding which covered the mouth of the well, and almost immediately there was seen issuing from the orifice a column of water, nearly five inches in diameter, which rose with prodigious force to the height of 100 feet, diffused itself on all sides like the branches of a magnificent palm tree, and thus formed the most extraordinary *jet d'eau* imaginable. The water, clear as crystal, issues from the soil at a temperature of 66 deg. F., charged with 3.4 per cent. of pure salt, and gives a volume of 40 cubic feet per minute. It is forced up by an atmosphere of carbonic acid gas acting with a force of fifty atmospheres. The total depth of the well is 2047 feet. It is calculated that this spring will yield annually about 293 tons of salt, which, deducting expenses, will add £30,000 to the revenue of Bavaria."—*From Gaz. Med. in Jour. de Phar.*

Air or Water Pessary.—Mr. Higginson showed an ingenious contrivance for acting as a pessary, as a plug to check extensive hemorrhage, or for dilating the os uteri. It consisted of a common small bladder, into the neck of which a gutta percha tube is inserted and secured. Whilst flaccid the bladder was to be introduced into the vagina, or even so far, if needful, as through a partially dilated os uteri; and an enema pump, or elastic bottle, being fitted to the gutta percha tube, air or water might be injected into the bladder, until it was distended so as to fill the vagina, or to dilate the os uteri to the required degree.—*Proc. Liver. Med. Society.*

Iodine Vapor in Phthisis.—M. Chartroule read an essay on the use of iodine vapors, in which he attributed to this mode of the exhibition of iodine a superiority over other modes or forms.—*Acad. Med., Paris.*